

REMARKS

The Office Action indicated that Claims 6-13 and 21-28 are allowed. Additionally, Claims 1-4, 14-19 and 29-30 were rejected under 35 U.S.C. §102(a) as being anticipated by U.S. Patent No. 5,798,583 to Morita.

As discussed below, with respect to independent Claims 1 and 16, Applicants contend that the Office Action fails to show that the Morita reference teaches or suggests a stator with at least one reduced height stator tooth having fewer laminate layers than a remainder of the stator teeth.

The Office Action states, “*The stator teeth includes laminated layers having at least one reduced height stator tooth (44), the reduced height stator tooth has few layer than the remainder of the stator teeth and the reduce height stator tooth being positionable adjacent the head stack (20) assembly for the purpose allowing the head stack assembly to pivot over the reduced height stator tooth.*” (Office Action, pages 2-3) Applicant respectfully requests reconsideration of this particular determination as the figures and those accompanying portions of the Morita reference actually teach the opposite.

Referring now to the Morita reference, it states:

“*The stator core 42 has an annular or cylindrical portion 43, nine winding portions 44, and pole portions 45. The annular portion 43 is fitted on the outer circumferential surface of the support 28. The nine winding portions 44 extend from the outer circumferential surface of the annular portion 43 outward in the radial direction with respect to the central axis C. The pole portions 45 are formed on the extending ends of the respective winding portions 44. The winding portions 44 are provided equidistantly in the circumferential direction of the annular portion 43. A*

*coil 46 is wound on each winding portion 44. Each pole portion 45 is formed to be larger than the width of the corresponding winding portion 44 in the circumferential direction of the annular portion 43, and opposes the inner circumferential surface of the magnet 39 with a small gap.” (col. 6, lns. 46-60)*

As is seen in Figure 3, all of the stator teeth (the combination of the winding portion 44 and the associated portion 45) are the same. The Morita reference teaches the concept that such stator teeth may be formed though the use of multiple layers. Further, the winding portions 44 may be pressed so as to be reduced in thickness. This is illustrated in Figures 5 and 6. Figure 5 depicted the winding portion 44 prior to being pressed, and Figure 6 depicted the winding portion after being pressed. (col.4, lns. 53-57; col. 7, lns. 3-35) The sequence of manufacturing steps is disclosed in Figures 7A to 7C, and 7E to 7G. (col. 8, lns. 24-41)

The Morita specification further compares the disclosed stator to a conventional stator in the following discussion:

*“FIG. 7D shows a conventional magnet 38' and stator 32' which is formed by winding coils 46' on the winding portions 44' of a stator core 42' formed by stacking four core forming members. Assuming that the stacking thinness of the stator core 42' is defined as S2 and that the thickness of each end portion of the coil 46' is defined as L, the thickness of the entire stator 32' is S.*

*“As is apparent from comparison with the conventional stator 32' shown in FIG. 7D, in the stator 32 of this embodiment shown in FIG. 7C, when the winding portion 44 of the stator core 42 is formed thin by squeezing, the thickness L of the coil 46 wound on the winding portion 44 is absorbed entirely or at least partly. Despite that the number of stacked core forming members is increased from four to six, the*

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*thickness S of the entire stator 32 is maintained at substantially the same value as that of the conventional stator 32.”* (col. 8, lns. 42-58)

Figures 9-19 disclose five additional embodiments for the stator and their respective stator teeth. (col. 4, ln. 62 to col. 5, ln. 37; col. 6, ln. 6 to col. 13, ln. 16)

Turning now to Applicants' Claim 1, there is recited a stator with “stator teeth having at least one reduced height stator tooth, the reduced height stator tooth having fewer laminate layers than a remainder of the stator teeth.”

Nowhere in the Morita reference does there appear to be a teaching or suggestion that a selected one of the stator teeth may be different from the remainder of the teeth. Thus, while the reference discloses six different embodiments of stator teeth and shows a couple of prior art stator teeth, there is no suggestion that such different stator teeth may be combined in a single stator. In contrast, the Morita reference teaches that all of the stator teeth are the same for a given stator (such as seen in Figure 3). As such, Applicants request reconsideration of the applicability of the Morita reference as to Claims 1-4 and 16-19.

With respect to independent Claims 14 and 29, Applicants contend that the Office Action fails to show that the Morita reference teaches or suggest a reduced height stator tooth having laminate layers formed to a second thickness less than a first thickness of a remainder of the stator teeth.

With respect to independent Claims 14 and 29, the Office Action contends the Morita reference teaches “*a reduce height stator tooth having laminating layers formed to have second thickness (43) less than the first thickness (45) for the purpose of improving the magnetic circuit characteristic.*” (Office Action, page 3) However, as discussed above, nowhere in the Morita reference does there appear to be a teaching or suggestion that a

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selected one of the stator teeth may be different from the remainder of the teeth. Thus, while the reference discloses six different embodiments of stator teeth and shows a couple of prior art stator teeth, there is no suggestion that such different stator teeth may be combined in a single stator. In contrast, the Morita reference teaches that all of the stator teeth are the same for a given stator (such as seen in Figure 3). As such, Applicants request reconsideration of the applicability of the Morita reference as to Claims 14-15 and 29-30.

On the basis of the foregoing, Applicants therefore submit that each basis for rejection has been fully addressed, and therefore the Application is in condition for allowance. Should the Examiner have any suggestions for expediting allowance of the Application, the Examiner is invited to contact Applicants' representative at the telephone number listed below. Should any additional fees be due please charge Deposit Account No. 19-4330.

Respectfully submitted,

Date: 1/13/05

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